

LISTING OF THE CLAIMS

The following is a complete listing of the claims:

1-17. (Canceled)

18. (Currently Amended) A porous pitch-based foam comprising a density ranging from about 0.1 g/cm³ to about 0.8 g/cm³, a compressive strength in the range of about 2000 psi to about 6000 psi and a thermal conductivity below about 1.0 ~~W/mK~~ W/mK manufacture by the process comprising:

selecting a mesophase carbon powder derived from a petroleum pitch exhibiting a softening point of above about 300°C;

placing a mesophase carbon particulate in a ceramic mold;

heating said mesophase carbon particulate in said mold under a non-oxidizing atmosphere at a pressure ranging from about 50 psi to about 500 psi to a temperature ranging from about 300°C to about 700°C; and

controllably cooling said green foam at a cooling rate of about 10°C/minute to a temperature of about 100°C.